

**What Is Claimed Is:**

1. A method of fabricating a fuel injector comprising:
  - providing a clean room;
  - fabricating a fuel group in the clean room;
  - fabricating a power group exterior of the clean room;
  - inserting the fuel group into the power group; and
  - fixedly connecting the fuel group to the power group.
2. The method according to claim 1, further comprising, prior to inserting the fuel group into the power group, performing at least one fuel flow tests on the fuel group.
3. The method according to claim 2, wherein the at least one fuel flow tests are performed exterior of the clean room.
4. The method according to claim 1, wherein the inserting is performed exterior of the clean room.
5. The method according to claim 4, wherein the fixedly connecting is performed exterior of the clean room.
6. The method according to claim 1, further comprising, prior to fabricating the fuel group, assembling a fuel tube, assembly, the fuel tube assembly including an inlet tube and a non-magnetic shell.
7. The method according to claim 6, wherein assembling the fuel tube assembly is performed exterior of the clean room.
8. The method according to claim 7, further comprising, after assembling the fuel tube assembly, performing a leak test on the fuel tube assembly.

9. The method according to claim 8, further comprising, after performing the leak test, washing the fuel tube assembly.
10. The method according to claim 9, further comprising, prior to washing the fuel tube assembly, placing the fuel tube assembly in the clean room.
11. The method according to claim 10, further comprising, after washing the fuel tube assembly, inserting a filter into the fuel tube assembly.
12. The method according to claim 11, further comprising, after installing the filter, inserting an armature assembly into the fuel tube assembly.
13. The method according to claim 1, wherein inserting the fuel group into the power group is performed exterior of the clean room.
14. The method according to claim 13, wherein the non-magnetic shell is inserted into the power group prior to the inlet tube.
15. The method according to claim 1, wherein fabricating the power group comprises:
  - providing a magnetic housing;
  - providing an electro-magnetic solenoid coil; and
  - fixedly connecting the magnetic housing to the electro-magnetic solenoid coil.
16. The method according to claim 15, wherein fabricating the power group further comprises fixedly connecting at least one electrical terminal to the electro-magnetic solenoid coil.

17. The method according to claim 16, wherein fabricating the power group further comprises forming a dielectric overmold over at least part of the magnetic housing, the electro-magnetic solenoid coil, and the at least one electrical terminal.
18. The method according to claim 1, wherein inserting the fuel group into the power group is performed exterior of the clean room.
19. The method according to claim 18, wherein the fixedly connecting is performed exterior of the clean room.
20. The method according to claim 19, wherein the fixedly connecting comprises welding the power group to the fuel group.